
Introduced by Senator Corbett

January 6, 2014

An act relating to health.

LEGISLATIVE COUNSEL'S DIGEST

SB 836, as introduced, Corbett. Brain research: funding program.

Existing law establishes various health research grant programs, including the Cancer Research Program, the Breast Cancer Research Program, and the Spinal Cord Injury Research Program.

This bill would state the intent of the Legislature to enact legislation that would provide funding for the purpose of establishing and operating a California-based research funding program to complement a specified national brain research program.

Vote: majority. Appropriation: no. Fiscal committee: no.
State-mandated local program: no.

The people of the State of California do enact as follows:

- 1 SECTION 1. (a) The Legislature hereby finds and declares
2 all of the following:
3 (1) In April 2013, the Obama Administration unveiled the Brain
4 Research through Advancing Innovative Neurotechnologies
5 (BRAIN) Initiative — a collaborative project that will map the
6 activity of every neuron in the human brain with a projected total
7 investment of more than \$300 million per year over 10 years.
8 (2) The BRAIN Initiative is launching with approximately \$110
9 million in funding for research in 2014, as well as additional private
10 sector investment from institutes and foundations based in
11 California.

1 (3) California is poised to be a world leader in this research
2 effort given the prominent role of scientists and industry leaders
3 throughout the state.

4 (4) Four of the six scientists who proposed the BRAIN Initiative
5 and six of the 15 members of the Advisory Committee to the
6 Director of the National Institutes of Health for the BRAIN
7 Initiative are from California.

8 (5) Some California-based corporations have indicated they are
9 interested in collaborating with brain research institutions on
10 research for the BRAIN Initiative to bring new discoveries to the
11 marketplace.

12 (6) The BRAIN Initiative has the potential to be a major driver
13 of new industries and jobs in biotechnology, artificial intelligence,
14 and information technologies, as well as a catalyst for major
15 breakthroughs in brain-related diseases, injuries, and illnesses,
16 including Alzheimer's, which is projected to cost California over
17 \$30 billion a year by 2030.

18 (7) The products of scientific research improve the quality of
19 our lives and health and provide us with high-quality jobs that
20 employ and demand a highly skilled workforce.

21 (8) Achievements from investments in research have increased
22 life expectancy by more than 50 percent, decreased death rates
23 from heart disease, stroke, tuberculosis, and HIV, created the
24 transistor, the laser, the accelerator, and the personal computer,
25 explored space, invented new materials like Kevlar and Teflon,
26 given rise to the Internet, and led to the growth and dominance of
27 the United States economy.

28 (9) A 2013 American Society for Biochemistry and Molecular
29 Biology study on Nondefense Discretionary Science found that
30 the research of United States laboratories commercialized by
31 United States companies led to a drop in the yearly cancer mortality
32 rate that saves the United States \$500 billion per year in health
33 care costs and that the information technology sector, built largely
34 on discoveries by federally funded scientists, contributes nearly
35 \$1 trillion per year on the United States gross domestic product.

36 (10) According to the 2011 Battelle Memorial Institute study,
37 a recent major research initiative, the Human Genome Project,
38 returned \$141 to the United States economy for every dollar
39 invested.

1 (11) The 2009 National Bureau of Economic Research study
2 on the broader economic impacts of research and development
3 showed a \$2.50 to \$3 return for every dollar invested.

4 (12) Strategic investments by the state can also assist in the
5 development of technology clusters including the biotechnology
6 ecosystems of the San Francisco Bay area and the San Diego
7 region. A 2009 study by Steven Casper, Interim Dean of the Keck
8 Graduate Institute of Applied Life Sciences, on building successful
9 biotechnology clusters found that research funding that promotes
10 academic and industry collaboration can stimulate inventor
11 networks that are an important factor in developing strong regional
12 technology clusters.

13 (13) Funding research is overwhelmingly supported by the
14 public with nearly three-quarters of Americans thinking that
15 government investments in basic scientific research and in
16 engineering and technology pay off in the long run, according to
17 a July 2009 Pew Research Center poll on funding scientific
18 research.

19 (14) Given California's assets and capacity for collaboration,
20 entrepreneurship, and innovation, a state investment to expand and
21 accelerate this research in the state and to promote the translation
22 of breakthroughs into the marketplace is an important investment
23 for California's economic future.

24 (b) It is the intent of the Legislature to enact legislation that
25 would provide funding for the purpose of establishing and
26 operating a California-based research funding program to
27 complement the national BRAIN Initiative. It is the intent of the
28 Legislature to enact legislation that would ensure that this state
29 research funding program does all of the following:

30 (1) Includes nonstate matching funds over the life of the
31 program.

32 (2) Includes a strong emphasis on fostering technology transfer
33 of new discoveries into the marketplace.

34 (3) Promotes collaboration among both public and private
35 academia and industry.

36 (4) Ensures that research efforts and priorities are
37 well-coordinated to maximize the benefits to taxpayers for
38 investments from state, federal, and private sector sources.

O